## **Source Water Protection Program**

## 2007 Draft SWP Project Priority List

SWP	ВР	Pop.	WaterSystem Name	Project	No	WS Problem	Project Description	Costs	FY
SWWP-A	11	50	SOUTH SAN JOAQUIN IRRIGATION DISTRICT	5010040		Primary concern is microbial contamination from 1)cattle activities on watershed, 2) sanitary facilities (pit toilets) in the recreational areas, and 3) body contact recreation at the reservoir. This project would address all three sources.	Project will include berming and fencing the canal at critical areas to preclude cattle access, rerouting selected drains to prevent direct discharge of ag drainage to canal, construction of new sanitary facilities at the park to eliminate pit toilets, po	\$2,000,000	2000
	11	926	Squaw Valley Public Service District	3110020		The attached Draft Squaw Valley source Water Assessments describes the types of contaminants and the associated PCAs. The document also provides a relative ranking of the well exposure to potential sources of contamination.	Squaw Valley PSD Source water Protection Program. The project will identify, locate and map test wells, monitoring wells and abandoned wells that may create a conduit for contaminants to enter the groundwater. More than 50s of these wells exist.	\$75,000	2001
	11	883625	San Francisco Regional Water System	3810001		(SFPUC No. 21) (Contaminants of concern are essentially microbial, potential from VOCs; sources of these contaminants are farms ranches, dwellings etc within the Upper Alameda Creek Watershed	VOC sources would be addressed by acquisition of critical watershed land within high water quality vulnerability; Upper Alameda Creek Watershed	\$2,000,000	2000
	8	11653	Nevada ID - Loma Rica	2910006		Microbial from human and animal contact and septic systems; DBP precursors from organic load; contaminants in runoff from upslope urban area and roads	Relocate source water from 37,000 ft of canal and 90 AF regulating reservoir to 22,000 ft buried pipeline; deliver water via closed conduit from the source (Deer Creek) to the WTP.	\$2,000,000	2005
	8	12745	Nevada ID - E. George, Banner Mountain	2910004		Microbial from human and animal contact and septic systems; DBP precursors from organic load; contaminants in runoff from upslope urban area and roads	Relocate source water from 28,000 ft of canal to 10,000 ft buried pipeline; deliver water via closed conduit from the source (Deer Creek) to the WTP.	\$2,000,000	2005
	7	20948	Santa Fe I.D.	3710023		SWPP Joint reservoir project; urban runoff contaminants impact raw water quality	SWPP Joint reservoir project; urban runoff collection/diversion system	\$2,000,000	2000
	4	600	NORTH EDWARDS WD	1510052		Septic tanks are installed in Zone A, B5 and B10 of Wells #1 and #2.	At present, there are vacant lots next to Wells 1 and 2. The Board of Directors would like to acquire the empty lots to prevent any more septic system installation close to the well heads.	\$24,000	2002
	4	3594	TUD - Columbia Water System	5510013		THE LOWER COLUMBIA DITCH LOOSES WATER THROUGH LEAKS AND IS CONTAMINATED BY LOCALIZED AG RUNOFF.	PIPE APPROXIMATELY 800 FEET OF DITCH AND GUNITE LINE APROXIMATELY 2000 FEET OF DITCH.	\$150,000	2006
	4	3594	TUD - Columbia Water System	5510013		THE MATELOT DITCH AND RESERVOIR THAT SUPPLY THE WTP ARE SUBJECT TO CONTAMINATION.	CONSTRUCT RESERVOIR IMPROVEMENTS AND PIPE THE MATELOT DITCH TO PROVIDE SOURCE WATER PROTECTION.	\$1,210,000	2006

SWP	ВР	Рор.	WaterSystem Name	Project	No	WS Problem	Project Description	Costs	FY
SWWP-A	3	1743	Willow Creek C.S.D.	1210015		Storm Water Bypass- Willow Creek CSD water supply; Storm water runoff from state highways 299, 96 and county roads are collected by a storm water system and discharged into Willow Creek at a point up stream from the WCCSD infiltration gallery (WCCSD water	Design and construct storm water interceptor and bypass of water system infiltration galleries.	\$80,000	2002
	3	3000	North Marin WD - Pt. Reyes	2110006		Micribial and chemical contamination associated with impacts of flooding of Lagunitas Creek on Wells 2 and 3.	As determined by feasibility study-modifications to wellheads, well casings, enclosures and surface grading and drainage. Study due 8/31/2000 per 10/28/99 Water Supply Permit.	\$100,000	2000
	3	56000	North Marin Water District	2110003		Dairy directly adjacent to reservoir. Reclassify from SRF to SWPP (6/11/01).	Develop Crypto Control Strategy installation of BMPs, sediment control structures, land/dairy purchase. Reclassify from SRF to SWPP (6/11/01).	\$122,000	1998
	0	623	TUD-Scenic View/Scenic Brook	5510033		THE PHOENIX DITCH THAT SUPPLIES THE WTP IS CONTAMINATED FROM RUNOFF CAUSING THE PLANT TO HAVE DIFFICULTY MEETING CAP.	CONSTRUCT A PIPELINE TO REPLACE THE OPEN DITCH FROM THE SHAWS FLAT PIPELINE TO PHOENIX ROAD.	\$200,000	2006
	0	198587	Contra Costa Water District	0710003		There are over 250 individual, unfiltered storm drain connections to the canal. PCAs include microbial contaminations (including potential fecal contamination) from diary and other agricultural land drainage into Canal; hydrocarbon, chemical and others.	Storm Drainage Management Program	\$2,000,000	2004
	0	1300000	East Bay MUD	0110005		SWPP Cryptosporidium and other pathogens have been identified with grazing activity near reservoirs and tributaries; project will address direct access of cattle / horses to ponds, streams / reservoirs in the East Bay Watershed.	SWPP EB watershed fencing to mitigate Cryptosporidium contamination. The project would (1) outfence approximately 30 ponds to prevent direct access of domestic animals of the ponds and supply alternative trough watering facilities at each pond site, an	\$2,000,000	2001
Total of p	proje	cts in SWI	PP Category SWWP-A = 1	5 projects					
Total Co	st for	Projects i	in Category SWWP-A :		\$1	5,961,000			
SWWP-B	3	5412	Montara Water and Sanitary District	4110010		Nitrate contamination in the Airport 3 and North Airport 2 wells is apparently migrating from agricultural property to the east. Nitrate concentrations often exceed the MCL. A shallow aquifer and proximity to the source make mitigation impossible.	Our project would focus on evaluating adjacent agricultural practices and education on BMPs, land acquisitions and /or establishing conservation easements.	\$150,000	2000
	0	7788	GOLDEN HILLS CSD	1510045		SWPP Rising nitrate levels due to every residence using septic systems. Ground water management.	SWPP Complete source water protection plan. Hire necessary engineers and hydrologists.	\$50,000	2001
						2007 D. C. GWD D. L. D. L. L.			

SWP	ВР	Pop.	WaterSystem Name	e Project No	WS Problem	Project Description	Costs	FY
Total of	projec	ts in SW	PP Category SWWP-B = :	2 projects				
Total Co	st for	Projects	in Category SWWP-B :		\$200,000			
SWWP-C	5	14351	Los Osos Community Services District	4010016 001	Septic system abatement Project	See attachment A	\$2,000,000	2000
	5	14351	Los Osos Community Services District	4010016 003	Groundwater WQ Monitoring Program-See attachment A	See attachment A	\$500,000	2000
	4	110	Yosemite Alpine CSD		A protected watershed for the entire Fish Camp area is being propsed. No other watersheds exist in the Fish Camp area. Development of the proposed watershed area would place (4) water systems in jeopardy of becoming contaminated and/or over drafted	Create a common watershed to ensure an adequate long term supply of uncontaminated water for the entire Fish Camp area. The proposed watershed is of very high water quality. Due to ist protected loc, the water quality can be maintained w/o risk of conta	\$2,000,000	2004
	3	4280	CalAm - Arden		septic sources. Nitrate concentrations exceeing	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study,we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	\$125,000	2000
	3	18912	CalAm - Rosemont			We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	\$125,000	2000
	3	34746	CalAm - Suburban		Nitrate contamination in the Whitewater well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	\$125,000	2000
	3	34746	CalAm - Suburban		Nitrate contamination in the Malaga well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	\$125,000	2000
	3	34746	CalAm - Suburban		Nitrate contamination in the Point Reyes well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	\$125,000	2000

	46857	CalAm - Lincoln Oaks	3410013		We propose to initiate a planning study to inventory	\$125,000	2000
3				sources. Nitrate concentrations exceeding one- half the MCL at this well (in an established	PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring i		2000
	140000	SAN BERNARDINO CITY	3610039	017 The City of San Bernardino relies 100% on 47 groundwater wells for its domestic water supply. The Bunker Hill Groundwater Basin has identified plumes of VOCs, nitrates, DPCP, radiological, elevated levels of TDS, and perchlorate in excess of current MCLs.	See attached description of project	\$400,000	2000
ojects	in SWP	PP Category SWWP-C = 1	10 projects				
for P	rojects i	n Category SWWP-C :		\$5,650,000			
11	46900	South Tahoe PUD - Mair	n 0910002	underground fuel tanks has contaminated or is threatening to contaminate 12 District wells. The 12 wells have been shut off.	assessments, that emphasizes the "early detection and immediate response" to MTBE/gasoline releases. To	\$1,385,000	2000
6	750	Cuesta La Honda Guild, Inc.	4110012	and contamination from agricultural pesticides.		\$2,000,000	2004
ojects	in SWP	PP Category SWWP-D = 2	2 projects				
for P	rojects i	n Category SWWP-D :		\$3,385,000			
0	48418	RIALTO-CITY	3610038	004 Perchlorate contamination in GW Basin	Drill barrier wells to stop spread of contamination	\$2,000,000	2003
ojects	in SWP	PP Category SWWP-E = 1	l project				
for P	rojects i	n Category SWWP-E :		\$2,000,000			
6 1	300000	East Bay MUD	0110005	Easement; Microbial (septic systems), nitrate		\$1,100,000	2002
3	5372	ACWA Sutter Creek	0310003	earthen, to transport source water. The Canal	Watershed management projects include fencing to prevent access from livestock, storm water drainage diversions, and related improvements.	\$1,131,000	2000
f 1	for P  6  ijects for P  0  ijects for P  6  1	for Projects in 1 46900  6 750  jects in SWF for Projects in 3 48418 jects in SWF for Projects in 5 1300000	for Projects in Category SWWP-C:  1 46900 South Tahoe PUD - Main  6 750 Cuesta La Honda Guild, Inc.  ijects in SWPP Category SWWP-D = 2  for Projects in Category SWWP-D:  0 48418 RIALTO-CITY  ijects in SWPP Category SWWP-E = 2  for Projects in Category SWWP-E:  6 1300000 East Bay MUD	for Projects in Category SWWP-C:  1 46900 South Tahoe PUD - Main 0910002  6 750 Cuesta La Honda Guild, 4110012 Inc.  1 jects in SWPP Category SWWP-D = 2 projects for Projects in Category SWWP-D:  0 48418 RIALTO-CITY 3610038 1 jects in SWPP Category SWWP-E = 1 project for Projects in Category SWWP-E:  6 1300000 East Bay MUD 0110005	pjects in SWPP Category SWWP-C : \$5,650,000  1 46900 South Tahoe PUD - Main 0910002 001 MTBE contamination from leaking underground fuel tanks has contaminated or is threatening to contaminate 12 District wells. The 12 wells have been shut off.  6 750 Cuesta La Honda Guild, 4110012 002 Vineyard development and resultant siltation and contamination from agricultural pesticides.  6 750 Cuesta La Honda Guild, 4110012 002 Vineyard development and resultant siltation and contamination from agricultural pesticides.  7 Source of Projects in Category SWWP-D = 2 projects or Projects in Category SWWP-D : \$3,385,000  0 48418 RIALTO-CITY 3610038 004 Perchlorate contamination in GW Basin or Sylvets in SWPP Category SWWP-E = 1 project or Projects in Category SWWP-E : \$2,000,000  6 1300000 East Bay MUD 0110005 029 Pardee Reservoir WQ Protection Conservation Easement; Microbial (septic systems), nitrate (from large livestock concentrations or agricultural fertilizers), chemicals (from herbicide/pesticide use)  3 5372 ACWA Sutter Creek 0310003 006 System uses a 24 mile open canal, mostly earthen, to transport source water. The Canal is exposed to storm water run-off and livestock.	picts in SWPP Category SWWP-C = 10 projects or Projects in Category SWWP-C : \$5,650,000  1 46900 South Tahoe PUD - Main 0910002 001 MTBE contamination from leaking underground fuel tanks has contaminated or is threatening to contaminate 12 District wells. The 12 wells have been shut off.  6 750 Cuesta La Honda Guild, Inc.  6 750 Cuesta La Honda Guild, Inc.  6 750 Cuesta La Honda Guild, Inc.  7 Cuesta La Honda Guild, Inc.  8 Cuesta La Honda Guild, Inc.  8 Cuesta La Honda Guild, Inc.  8 Cuesta La Honda Guild, Inc.  9 Cuesta	Section   SWPP   Category   SWWP-C = 10   projects   Section   Category   SWWP-C   Section   Section   Category   SWWP-C   Section   Section   Category   SWWP-C   Section   S

SWP	ВР	Pop.	WaterSystem Name	Project	No	WS Problem	Project Description	Costs	FY
SWWP-F	3	56000	North Marin Water District	2110003		Storm events increase level of microbial and agricultural runoff (cattle) and sediments (erosion) impacts to Stafford Lake.	Buffer strip development with possible purchase of conservation easement son ranch property.	\$100,000	2000
	3	56000	North Marin Water District	2110003		Horse manure and associated contaminants (microbials, organic precursors to DBP) from stable operation adjacent to tributary to Stafford Lake.	Develop a cooperative horse manure recycle program in conjunction with Marin County Stormwater Control Program.	\$15,000	2000
Total of	projec	ts in SW	PP Category SWWP-F = 4	projects					
Total Co	st for	Projects	in Category SWWP-F :		\$	\$2,346,000			
SWWP-H	7	177630	Sweetwater Authority	3710025		Contaminants include microbial and chemical constituents associated primarily with urban and rural residential development.	Funding would be used to purchase property in sensitive areas in order to provide control over potential microbial and chemical contamination and extend the Authority's ability to protect its source waters. Project will also include additional watershed m	\$900,000	2000
	4	883625	San Francisco Regional Water System	3810001		(SFPUC No. 1) Microbial contamination from run-off and erosion of banks may be attributed to disrepair of the Alameda Creek tunnel outfall which discharges diverted water into the Calaveras Reservoir.	The contaminants of concern will be addressed by improvements to the tunnel. The slopes on either side of the tunnel will be stabilized and debris will be cleared, which will reduced the contribution of microbial contamination and sedement deposition into	\$250,000	2000
	3	1267	CalAm - Isleton	3410012		The Isleton 2 well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	4280	CalAm - Arden	3410045		The Fulton/Fair Oak well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	4280	CalAm - Arden	3410045		The Larch Ln well periodically shows evidence of raw water totoal coliform presence and indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	18912	CalAm - Rosemont	3410034		The Southport well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	18912	CalAm - Rosemont	3410034		The Westporter well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000

SWP	ВР	Pop.	WaterSystem Name	Project	No WS Problem	Project Description	Costs	FY
SWWP-H	3	33578	CalAm - Antelope	3410031	evidence of raw water total coliform presence and indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide Public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	46428	CalAm - Parkway	3410017	of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	46428	CalAm - Parkway	3410017	of raw water total coliform presence, an indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	46428	CalAm - Parkway	3410017	of raw water total coliform presence, an indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	46428	CalAm - Parkway	3410017	evidence of raw water total coliform presence an indicator of microbial contamination	We propose t initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	\$95,000	2000
	3	46857	CalAm - Lincoln Oaks	3410013	evidence of raw water total coliform presence, an indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education propgrams along with program elements associated with CDWSAPP	\$95,000	2000
	0	56000	North Marin Water District	2110003	of Stafford Lake.	Seek voluntary repair of failing septic systems through a low interest loan program to qualified residents on Stafford watershed.	\$50,000	2000
	0	56000	North Marin Water District	2110003		Update system to current standards with pumping redundancy and spill protection.	\$100,000	2000
Total of	projec	ts in SWI	PP Category SWWP-H = 1	5 projects				
Total Co	st for	Projects	in Category SWWP-H:		\$2,345,000			
SWWP-I	5	14351	Los Osos Community Services District		attachment A	See attachment A	\$100,000	2001
	0	20948	Santa Fe I.D.	3710023		Monitoring, PMB, education; baseline water quality monitoring;	\$2,000,000	2007

SWP BP Pop. WaterSystem Name Project No WS Problem Project Description Costs FY

Total of projects in SWPP Category SWWP-I = 2 projects

Total Cost for Projects in Category SWWP-I: \$2,100,000

Number of projects in SWP PPL= 51 projects

**Grand Total:** \$33,987,000

**Notes:**